

REMARKS/ARGUMENTS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 7-16 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Kong et al. in view of Japanese Patent 03-131017 to Satoyasu and Claims 7-10 and 12-15 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Berkman et al. in view of Satoyasu. Claims 1-6 have been canceled, without prejudice, while Claims 17 and 18 have been added and thus, Claims 7-18 remain active.

Considering then the rejection of Claims 7-16 under 35 U.S.C. § 103 as being unpatentable over Kong et al. in view of Satoyasu and the rejection of Claims 7-10 and 12-15 under 35 U.S.C. § 013 as being unpatentable over Berkman et al. in view of Satoyasu, it is to be noted that amended Claim 7 now claims a member that has a barrel type susceptor disposed inside thereof and surfaces each of which is oppositely disposed tilting in a same direction and a same distance from the surfaces as each of the surfaces of the barrel type susceptor. Correspondingly, amended Claim 12 now claims a member that has a barrel type susceptor disposed at a peripheral portion thereof and surfaces each of which is oppositely disposed tilting in the same direction and the same distance from the surfaces as each of the surfaces of the barrel type susceptor.

The barrel type susceptor claimed in Claims 7 and 12 of the present application serve to keep the distance between a susceptor board and an opposed susceptor board constant by oppositely disposing each of susceptor tilting in a same direction so that it can keep a temperature of each susceptor constant. In addition, because a board (a wafer) put on a susceptor board is parallel with the opposed susceptor board, any part of the board can be heated from a constant distance by the susceptor board. Therefore, when used for

semiconductor epitaxial growth, the board can be uniformly heated and therefore it allows simultaneously obtaining a plurality of epitaxial films high in the uniformity.

Kong et al. teaches a susceptor disposed a wafer inside or outside thereof. However, Kong et al. fails to teach that a susceptor board is disposed as to keep a uniform distance from each other as disclosed in a barrel type susceptor of Claims 7 and 12 of the present application. Kong et al. also fails to teach that the distance between a wafer surface and a heating susceptor (or a heater) is kept constant as claimed in the barrel type susceptor of Claims 7 and 12 of the present application.

Berkman et al. only teaches a susceptor disposed such that a plurality of wafer and the disclosed susceptor are not opposed to each other as to keep a constant distance between each susceptor boards as claimed in the barrel type susceptor of Claims 7 and 12 of the present application.

Satoyasu teaches a first susceptor having a recessed part holding a wafer inside surface and a second susceptor fitting to the recessed part while keeping a predetermined interval from the first susceptor. In addition, Fig. 1 in Satoyasu teaches the first susceptor horizontally rotates when growing in a gaseous phase. In this manner, because only the first susceptor rotates, the distance between susceptor boards are always changing, so is the cross-sectional area of gas path passed immediately above the wafer. In this case, since the flow rate of gas as a raw material and/or a gas volume passed immediately above the wafer per hour changes, it can be predicted that the variation of film thickness distribution regarding the flow direction of gas would become larger.

Therefore, the susceptor disclosed in Satoyasu differs from a barrel type susceptor in the claims 7 and 12 of the present application in which flow speed and supply of gas can be kept constant and the susceptor can be uniformly heated by constantly keeping a wafer surface and a susceptor board in a predetermined distance without rotating.

Consequently, it is submitted that one would not obviously derive the invention claimed in Claims 7 and 12 of the present application by the combination of the three references noted above. In the same manner, it is also considered that one cannot easily derive the invention set forth in dependent Claims 8 to 11 from Claim 7 and dependent Claims 13 to 16 from Claim 12 of the present application by combining the three references noted above.

New Claims 17 and 18 have also been added to claim that the barrel type susceptor is fixedly held in position within said member. This clearly differs from the rotatable susceptors shown in the prior art.

In view of the foregoing, it is submitted that each of Claims 7-18 patentably define over the above-noted references as well as the remaining references of record and therefore merit indication of allowability.

Respectfully submitted,

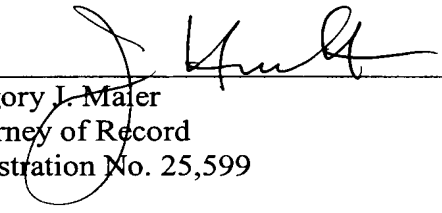
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